nificantly higher health care costs. Efforts to better control comorbid diseases such as cerebrovascular risk factors may decrease the future burden of VaD.

PNL14

HEALTH CARE UTILIZATION AND EXPENDITURES AMONG MEDICAID PATIENTS WITH PARKINSON'S DISEASE

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OBJECTIVE: Parkinson's disease (PD), a progressive neurological disorder, affects approximately 1% of the population over 65 in the United States. Average annual Medicaid costs per patient for all patients were $3759 in 1998. The overall economic burden of PD was estimated at $25 billion annually in 1997. This study quantifies direct medical care costs for individual Medicaid beneficiaries with PD. **METHODS:** Patients with at least 12 months of continuous enrollment in Medstat's MarketScan® Multi-state Medicaid claims database were identified. Patients were required to have either two claims with a diagnosis of PD (ICD-9-CM 332.0) or one diagnosis and two or more prescriptions for a PD-related medication (levodopa/carbidopa, dopamine agonist, MAO-B inhibitor, or COMT inhibitor). Health care utilization and expenditures accrued from the first observed diagnosis or prescription. Because patients were allowed to have varying lengths of follow-up (minimum: 12 months), expenditure and utilization data were annualized. **RESULTS:** A total of 11,882 patients with PD were identified and followed for an average of 821 days. The mean age of the sample was 73.9 years and 57.6% were women. Mean total annual health care expenditures were $18,586 (SD $25,592) per patient. Nineteen percent had at least one hospital admission while long term care was utilized by 15.8% of patients. Average annual inpatient hospitalization costs were $8921 (SD $1559), while long term nursing home care expenditures accounted for $31,434 (SD $27,659). In addition to PD-specific care, 16.9% were diagnosed with a fall or injury and 8.2% with dementia, while 44.4% were treated with antidepressants and 31.1% were treated with antipsychotic medications. **CONCLUSION:** Mean total health care expenditures for Medicaid patients with PD were nearly five times the average Medicaid costs previously reported for elderly beneficiaries. Further investigation of the burden of PD will entail comparisons to a matched cohort of Medicaid patients without PD.

PNL15

AN ECONOMIC ANALYSIS OF CALCIUM CHANNEL BLOCKERS FOR ACUTE TRAUMATIC BRAIN INJURY

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OBJECTIVES: To determine the costs, effects, and cost-effectiveness of the treatment of Traumatic Brain Injury (TBI) with calcium channel blockers vs. standard care. **METHODS:** A Monte Carlo model of acute TBI was constructed from the payer's perspective and used to compare the costs and effects of treatment with calcium channel blockers to standard care. The intervention modeled was the calcium channel blocker Nimodipine intravenously, 1 mg/hr the for first 2 hours and 2 mg/hr thereafter for up to 7 days to control intracranial pressure (ICP). Standard care is no drug intervention to control ICP. The outcomes of the model were good recovery, severe disability or persistent vegetative state (PVS), and death. Outcome probabilities were derived from the literature. Average treatment costs of TBI were derived from the literature. Modeling and sensitivity analysis were performed using Data 4.0. The incremental cost, incremental effectiveness, and incremental cost-effectiveness were tested using SPSS 11. **RESULTS:** The incremental cost of treating TBI with a calcium channel blocker was $15,469 above standard care ($p < 0.001$). The incremental effectiveness of treating TBI was 0.02 Quality Adjusted Life Years (QALY) more than standard care ($p < 0.001$). The incremental cost-effectiveness of treating TBI was $24,030 per QALY ($p < 0.001$). **CONCLUSIONS:** The incremental cost of treating TBI with a calcium channel blocker of $15,469 is significant, but it is not unreasonable. Considering the severity of the TBI and the importance that even a small reduction in mortality and disability would have, the incremental cost of treating TBI with a calcium channel blocker should not be considered an obstacle to treatment.

NEUROLOGICAL/GENETIC DISORDERS (Migraine, Alzheimer's, Parkinson's, MS, Epilepsy, Brain Injury, Hunter Syndrome, Insomnia)

NEUROLOGICAL/GENETIC DISORDERS (Migraine, Alzheimer's, Parkinson's, MS, Epilepsy, Brain Injury, Hunter Syndrome, Insomnia)—Quality of Life Studies

PNL16

FACTORS THAT DETERMINE EMPLOYABILITY IN EPILEPSY PATIENTS: A PILOT STUDY

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OBJECTIVE: Epilepsy affects up to 1% of the population. With advances in treatment, up to 90% of epileptics have reasonably controlled seizures. This has not translated into parity in the workplace and up to 25% of epileptics remain unemployed. In this study, we determine those variables that distinguish epileptics who work from those who do not. **METHOD:** Seventy patients aged 18–65 years with confirmed epilepsy who did not undergo epilepsy surgery or vagal nerve stimulator implantation was randomly selected from our epilepsy database. A 36-item multiple-choice questionnaire that focused on demographic, disease-related and employment-related information was sent. Patients were categorized as being full-time employed, part-time employed or unemployed. Using a Fischer exact test at a 90% level of confidence, we identified those variables that distinguished epileptics who were 1) employed (full-time and part-time) from those who were unemployed, and 2) full-time employed from non-fulltime employed. **RESULTS:** Nineteen questionnaires were returned Patients' ages ranged from 21 to 59 years and 63% were females. Twenty-six percent were married and 68% were Caucasians. Thirty-three percent were employed full-time and 61% were unemployed. Variables that distinguished epileptics who were employed (either fulltime or part time) were perceived higher intelligence ($p = 0.0429$), the absence of disability benefits ($p = 0.0152$), shorter history of seizures ($p = 0.0338$), and perceived importance of work for both personal ($p = 0.0498$) and financial ($p = 0.0498$) reasons. Variables that distinguished epileptics who were fully employed were perceived higher intelligence ($p = 0.0245$), the absence of disability benefits ($p = 0.0498$) and perceived importance of work for personal reasons ($p = 0.0537$). **CONCLUSION:** Employment among epileptics correlates with perceived intelligence, the absence of disability benefits, the duration of epilepsy and perceived importance of work. Most disease-related variables do not significantly influence employability. Integrating work-directed programs into the routine care of epileptics may decrease the level of unemployment in this population.